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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/650,855

08/29/2003

Kyung-Hun Jang

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7411

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EXAMINER

TAYLOR, NICHOLAS R

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/650,855	Applicant(s) JANG ET AL.	
	Examiner Nicholas Taylor	Art Unit 2441	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-4, 15, and 17-20 have been presented for examination and are rejected.

Response to Arguments

2. Applicant's arguments filed July 29th, 2008, have been fully considered but they are deemed not persuasive.

3. In the remarks, applicant argued in substance that:

(A) The prior art of Gubbi does not teach controlling the data generation rate based on the multimedia loss rate as recited in the independent claims. Gubbi uses only the buffer state information to control a data generation rate. While Gubbi may disclose compensating for packet loss, this is not the same as calculating the multimedia data generation rate based on the multimedia data loss rate.

As to point (A), Gubbi teaches a method for controlling a multimedia rate in a system that includes a data generator and a wireless terminal (see col. 3, lines 23-44, abstract, and fig. 1). The multimedia data is generated and transmitted in real time based on a multimedia data generation rate (see, e.g., col. 4, lines 23-40 and col. 7, lines 15-23). Multimedia rate modification is used, inter alia, to mitigate the impact of

Art Unit: 2441

“severe” network loss and error conditions on the transmission of multimedia data (see col. 5, lines 42-56).

Gubbi teaches the monitoring of transmission buffer state information and a multimedia loss data loss rate that are used in calculating the generation rate (Gubbi, col. 7, lines 14-23; col. 7, line 43 to col. 8, line 10; col. 8, lines 19-52; and see fig. 3). For example, Gubbi specifically teaches not only monitoring the standby information available in the buffer (see “high,” “normal,” and “low” of fig. 3), but monitoring the data loss rate (see, e.g., monitoring for “catastrophic” condition changes based on the severe network loss losses in col. 7, line 59 to col. 8, line 10). Further, as to the argument that multimedia network “packet loss” differs from the claimed “multimedia loss rate,” Applicant has failed to provide a persuasive reason why the claim language presents a more limited definition than that which would be met by the loss of a data packet in a packetized multimedia transmission system.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2441

5. Claims 1-4, 15, and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Gubbi et al. (U.S. Patent 6,891,822).

6. As per claims 1 and 3, Gubbi teaches an open-source method for controlling a multimedia data generation rate, comprising:

(a) generating multimedia data in real time according to a current multimedia data generation rate and transmitting the multimedia data from a data generator to a wireless terminal; (Gubbi, col. 3, lines 23-44; col. 4, lines 23-40; see also fig. 1 architecture)

(b) supplying transmission buffer, through which the multimedia data is transmitted, state information and a multimedia data loss rate during the transmission of the multimedia data from a first layer of the wireless terminal to a second layer of the wireless terminal; (c) calculating a real-time multimedia data generation rate based on the transmission buffer state information and the multimedia data loss rate, and transmitting the real-time multimedia data generation rate from the second layer to the data generator; and (Gubbi, col. 7, lines 14-23; col. 7, line 43 to col. 8, line 10; col. 8, lines 19-52; and see fig. 3)

(d) generating multimedia data in real-time according to the real-time calculated multimedia data generation rate and transmitting the generated multimedia data from the data generator to the wireless terminal (Gubbi, col. 3, lines 23-44; col. 4, lines 23-40; see also fig. 1 architecture)

Art Unit: 2441

wherein the transmission buffer state information includes an amount of standby multimedia data in the transmission buffer (Gubbi, col. 7, 43-67 and col. 8, lines 19-52).

7. As per claims 2 and 4, Gubbi teaches the system further wherein (c) comprises:

(c1) receiving the transmission buffer state information and the multimedia data loss rate from the second layer; and (Gubbi, col. 7, lines 14-23 and 43-67; col. 8, lines 19-52; and see fig. 3)

(c2) calculating the real-time multimedia data generation rate based on the transmission buffer state information, by lowering a current multimedia data generation rate when the transmission buffer state information indicates that a large amount of standby multimedia data exists in the transmission buffer or the multimedia data loss rate is high or increasing the current multimedia data generation rate when the transmission buffer state information indicates that a small amount of standby multimedia data exists in the transmission buffer or the multimedia data loss rate is low (Gubbi, col. 7, lines 14-23 and 43-67; col. 8, lines 19-52; and see fig. 3; e.g., see the high low threshold monitoring with associated rate change requests).

8. As per claim 15, Gubbi teaches the system further including a computer-readable recording medium on which a program enabling the method of claim 1 is recorded (Gubbi, col. 3, lines 23-44; col. 4, lines 23-40; see also fig. 1 architecture).

Art Unit: 2441

9. As per claim 17, Gubbi teaches a method for controlling a multimedia data generation rate, comprising:

determining a current wireless channel state; and (Gubbi, col. 3, lines 23-44; col. 4, lines 23-40; see also fig. 1 architecture)

generating multimedia data in real time according to a calculated multimedia data generation rate and transmitting the generated multimedia data, wherein: when the current wireless channel state is variable, calculating the multimedia data generation rate based on transmission buffer state information and multimedia data loss rate, and (Gubbi, col. 7, lines 14-23; col. 7, line 43 to col. 8, line 10; col. 8, lines 19-52; and see fig. 3)

otherwise, calculating the multimedia data generation rate based on a permissible polling cycle and packet length (Gubbi, col. 5, lines 42-568; line 53 to col. 9, line 24; fig. 4; where if no variability is detected the rate is not adapted)

wherein the transmission buffer state information includes an amount of standby multimedia data in the transmission buffer (Gubbi, col. 7, 43-67 and col. 8, lines 19-52).

10. As per claim 18, Gubbi teaches the system further wherein calculating the multimedia data generation rate based on transmission buffer state information and multimedia data loss rate comprises:

generating multimedia data in real time according to a current multimedia data generation rate and transmitting the multimedia data from a data generator to a first

Art Unit: 2441

layer of the wireless terminal; and (Gubbi, col. 3, lines 23-44; col. 4, lines 23-40; see also fig. 1 architecture)

supplying the transmission buffer, through which the multimedia data is transmitted, state information and the multimedia data loss rate during the transmission of the multimedia data from a second layer in the wireless terminal to a third layer in the wireless terminal; and transmitting the multimedia data generation rate from the third layer to the data generator (Gubbi, col. 7, lines 14-23; col. 7, line 43 to col. 8, line 10; col. 8, lines 19-52; and see fig. 3).

11. As per claim 19, Gubbi teaches the system further wherein calculating the multimedia data generation rate based on a permissible polling cycle and packet length comprises: receiving the current multimedia data generation rate; and receiving the permissible polling cycle and packet length (Gubbi, col. 5, lines 42-568; line 53 to col. 9, line 24; fig. 4).

12. As per claim 20, Gubbi teaches the system further wherein receiving the permissible polling cycle and packet length includes receiving from an access point (Gubbi, col. 3, lines 23-44; col. 4, lines 23-40; see also fig. 1 architecture).

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Taylor whose telephone number is (571) 272-3889. The examiner can normally be reached on Monday-Friday, 8:00am to 5:30pm, with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/650,855
Art Unit: 2441

Page 9

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